POWERCLASS™

PC6800 Owners Manual

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Congratulations and thank you.....

for choosing *Precision**Power*** audio epuipment. At *Precision**Power*** we proudly design, engineer and manufacture audio products at our facility in Phoenix, Arizona. Our award winning engineering team utilizes innovative technology to consistently deliver Absolutely State of the Art™ performance, sound quality, reliability, and value. This *Precision**Power*** product reflects our commitment to offer you unparalleled versatility and quality for years of dependable service and listening enjoyment.

Service

Do not attempt to service *Precision**Power*** products yourself. Performing exploratory surgery on your audio equipment yourself will void the warranty. Many parts of your *Precision**Power*** gear are custom built to our specifications. Our factory parts are not made available to anyone else nor are they for sale. Our goal is to make sure that your *Precision**Power*** product will always sound as good as the day it was purchased. Contact your authorized *Precision**Power*** dealer about obtaining any warranty service through *Precision**Power***.(See Warranty inside back cover)

FOR YOUR RECORDS:

Model _____

Serial Number _____

Purchase Date _____

Caution!

The extended use of a high powered audio system may result in hearing loss or damage. While *Precision**Power*** systems are capable of *"Concert Level"* volumes with incredible accuracy, they are also designed for you to enjoy at more reasonable levels all of the sonic subtleties created by musicians. Please observe all local sound ordinances.

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FEATURES / SPECIFICATIONS

PWM Switching Power Supply
Fully Complementary Triple Darlington Output Stage
AM IV Protection Circuitry
QBASS PLUS™
QBASS REMOTE™ Compatible
Power*Lock* Speaker and Power Wire Connectors
Variable, 6-Way Internal Crossover
Non-Fading Sub Channels
Balanced Differential Input Stage
High Voltage Input Capability with Input Attenuation Switch
Gold Plated RCA Input and Output Connectors
Mixed Mono/Stereo Operation
Multiple System Configuration
PSC-221 Input Switching
Three Year Warranty when installed by an Authorized *Precision****Power*** Dealer
Completely Designed And Handcrafted In The USA

Specifications

Power Bandwidth:	4.5 Hz - 100 kHz
Total Harmonic Distortion:	0.02 %
Input Topology:	Differential
Input Sensitivity:	150mv - 12 volts RMS
Input Impedance:	10k Ohms
Load Impedance (stereo)	2 - 8 Ohms
Load Impedance (bridged)	4 - 8 Ohms (Channels 1-4)
Load Impedance (bridged)	2 - 8 Ohms (Channels 5-6)
Supply Voltage	11 - 15 volts
Damping Factor	>500
Slew Rate	>50 V/µS
Idle Current:	2.25 Amps

Continuous Output Power

CHANNELS 1/2
50 WRMS x 2 @ 4Ω per channel
100 WRMS x 2 @ 2Ω per channel
200 WRMS x 1 @ 4Ω bridged

CHANNELS 3/4
50 WRMS x 2 @ 4Ω per channel
100 WRMS x 2 @ 2Ω per channel
200 WRMS x 1 @ 4Ω bridged

CHANNELS 5/6
50 WRMS x 2 @ 4Ω per channel
100 WRMS x 2 @ 2Ω per channel
200 WRMS x 2 @ 1Ω per channel
200 WRMS x 1 @ 4Ω bridged
400 WRMS x 1 @ 2Ω bridged

Dimensions

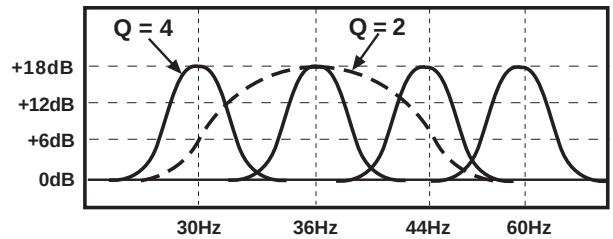
Length - 25.25"
Height - 2.25"
Width - 8.9"

QBASS PLUS™

On ***POWER**CLASS*™ amplifiers, we've taken bass control to a higher level with ***QBASS PLUS***™. The two ***QBASS*** switches (labeled 1 and 2) on the front end of the amplifier allow you to select one of four frequency centers - 30 Hz, 36 Hz, 44 Hz and 60 Hz. The Q SELECT switch determines the width of boosted frequencies. A 'Q' of 2 (switch out) will give you a wide boost while a 'Q' of 4 will boost a narrow range of frequencies (See chart below). On the rear end panel you will find the ***QBASS*** level control and the plug-in for an optional ***QBASS REMOTE***™ dash mounted level control. Adjust the level control clockwise for up to 18dB of boost at your selected frequency and Q.

QBASS™ Settings		
1	2	Freq.
IN	IN	30Hz
IN	OUT	36Hz
OUT	IN	44Hz
OUT	OUT	60Hz

QBASS PLUS™



Optional ***QBASS REMOTE***™
This boost control can be mounted in the dash and will supersede the boost control on the endplate.

Optional ***QPORT***™ expansion module allows one boost control to operate multiple amplifiers. Each ***QPORT***™ has outputs for four amplifiers as well as another ***QPORT***™ for greater expansion. See your Authorized *Precision***Power** Dealer for more information!

Crossover Specifications

PC PRO 6800

Linkwitz-Riley crossover topology used throughout.
High Pass (Channels 1/2, 12dB/Octave stereo) Fully Variable 20 Hz - 20 KHz.
Band Pass (Channels 3/4, 12dB/Octave stereo) Fully Variable 20 Hz - 20 KHz.
Sub or Band Pass Channels 5/6, (24dB/Octave mono Fully Variable 50 Hz - 500 Hz Lowpass or 12dB/Octave stereo 20 Hz - 20 KHz Bandpass).
Sub or Band Pass RCA outputs will be the opposite of Channels 5/6 Crossover.
QBASS PLUS™ on Lowpass assigned to Channels 5/6 or RCA OUTPUT.

CAUTION: ***QBASS PLUS***™ should only be used in systems with strong subwoofers. 18dB is a lot of bass boost and could damage full range speakers.

INSTALLATION

Tools/Parts needed for Installation (not supplied)

Small flat blade screwdriver
Phillips Screwdriver (#2 or medium sized)
Wire cutters
Wire strippers
4 - #6 round head screws, and 1 - #8 sheet metal screw
(or nut, bolt, and star washer)
2 - Ring connectors (large enough to accommodate your
method of grounding)
In-line fuse or circuit breaker - see fuse chart below
Power and ground wire - see Power Wire Calculator on page 3
Speaker wire - 16 gauge or larger
Grommets (sized to work with the power wire you plan to use
in your installation)
Tube of silicone sealant

Fuse requirements

Amplifier	Maximum Fuse Rating
Pro6800	80 Amp

You will need to install an in-line fuse or circuit breaker in the power wire within 18" of the battery. This fuse or circuit breaker is to protect your vehicle from fire in case the power wire shorts to the vehicle body. If you are only using one amplifier, use the fuse rating indicated in this chart. If you are using more than one amplifier, add up the fuse ratings for all the amplifiers. This sum is the rating for your fuse or circuit breaker. You may also want to add a power distribution block near your amplifiers to keep the wiring tidy.

The following is a basic formula to be used as a guide to determine current draw. A 50% amplifier efficiency rating is used as an average. Your new ***POWER**CLASS*™ amplifier is more efficient, other amplifiers will probably be less. This formula is to be used as a guideline. Using wire of a larger gauge can only improve the current transfer of your system. Do not use smaller gauge wire.

Total RMS output x 2 = Total Input Wattage

$$\frac{\text{Total Input Wattage}}{\text{Supply Voltage}} = \text{Current Draw (in Amps)}$$

Example: A ***POWER**CLASS*™ ***Pro6800*** amplifier has six channels at 50 watts RMS per channel into 4 Ohms (50 x 6 = 300). You would use the formula in the following way:

300W x 2 = 600W

$$\frac{600W}{12V} = 50A \text{ Total current draw.}$$

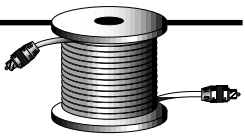
If the same amplifier is driven into a 2 Ohm stereo or 4 Ohm mono load, double it's 4 Ohm RMS rating. All ***POWER**CLASS*™ amplifiers will effectively double their power at this load.

300W x 2 x 2 = 1200W

$$\frac{1200W}{12V} = 100A \text{ Total current draw.}$$

If you are using more than one amplifier, add up the total current draw for all of them and choose the appropriate gauge based on the grand total.

Power Wire Calculator



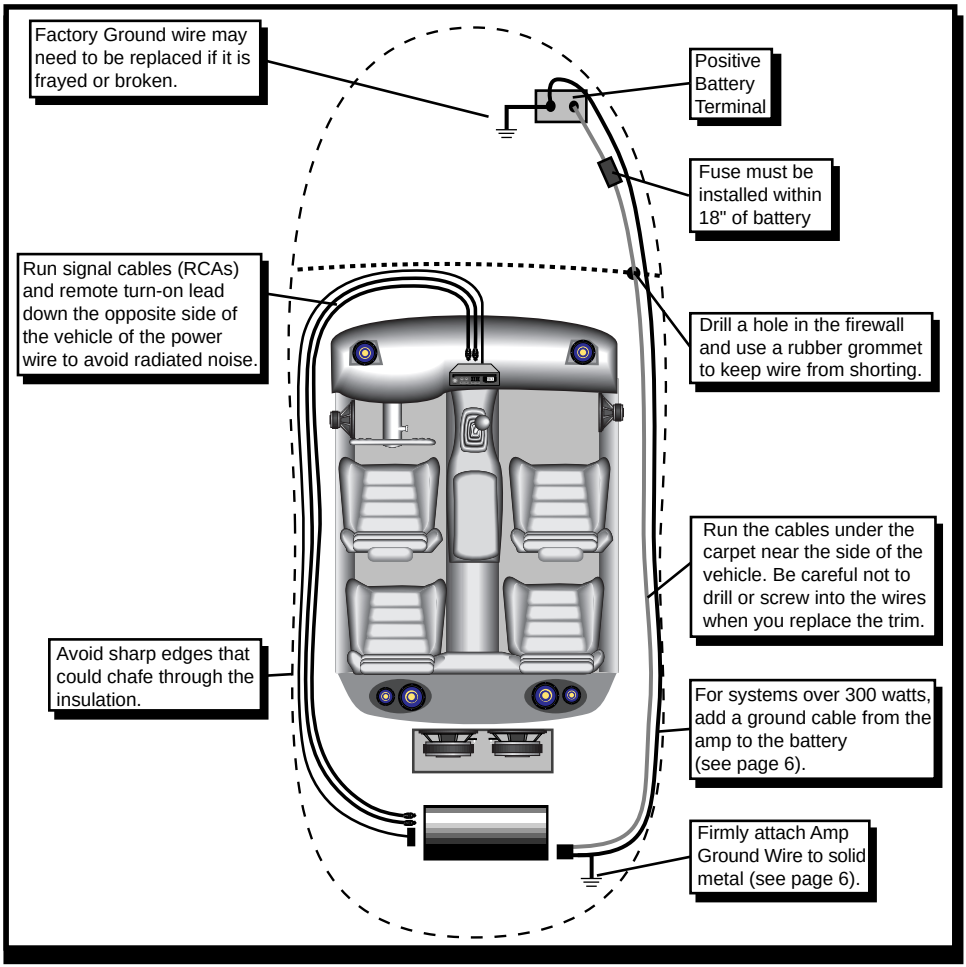
Recommended MINIMUM Gauge

Total Current Draw	Length Of Wire To Be Run							
(in Amps)	Up to 4ft.	4 to 7ft.	7 to 10ft.	10 to 13ft.	13 to 16ft.	16 to 19ft.	19 to 22ft.	22 to 28ft.
0-20	14	12	12	10	10	8	8	8
20-35	12	10	8	8	6	6	6	4
35-50	10	8	8	6	6	4	4	4
50-65	8	8	6	4	4	4	4	2
65-85	6	6	4	4	2	2	2	0
85-105	6	6	4	2	2	2	2	0
105-125	4	4	4	2	2	0	0	0
125-150	2	2	2	2	0	0	0	00

NOTE: The ground wire should be the same gauge as the power wire.

WIRING

Before beginning, disconnect the negative (-) terminal of the battery prior to working on the positive (+) terminal to prevent a short to ground. This is important, unless you want to spend the rest of your life with a nickname like *"Sparky,"* or *"Smokey."* Reconnect the negative terminal only after all connections have been made.


Factory Ground wire may need to be replaced if it is frayed or broken.
Positive Battery Terminal
Fuse must be installed within 18" of battery
Run signal cables (RCAs) and remote turn-on lead down the opposite side of the vehicle of the power wire to avoid radiated noise.
Drill a hole in the firewall and use a rubber grommet to keep wire from shorting.
Run the cables under the carpet near the side of the vehicle. Be careful not to drill or screw into the wires when you replace the trim.
Avoid sharp edges that could chafe through the insulation.
For systems over 300 watts, add a ground cable from the amp to the battery (see page 6).
Firmly attach Amp Ground Wire to solid metal (see page 6).

Warning!

Fuse must be installed within 18" of battery

Grounding

Locate an area near the amplifier(s) that is metal and clean an area about the size of a quarter to bare metal. Inspect the area around and underneath to be sure you won't drill into wires, brake or fuel lines, etc. Drill a pilot hole in the middle of this area. Terminate the ground wire with a ring connector and attach it to the bare metal using a #8 sheet metal screw and washer or preferably, a bolt, nut and a star washer (not supplied). We suggest crimping and soldering this connection. After the connection is complete, coat the area (on both sides) with silicone or some similar material to prevent rust from developing on the bare metal.

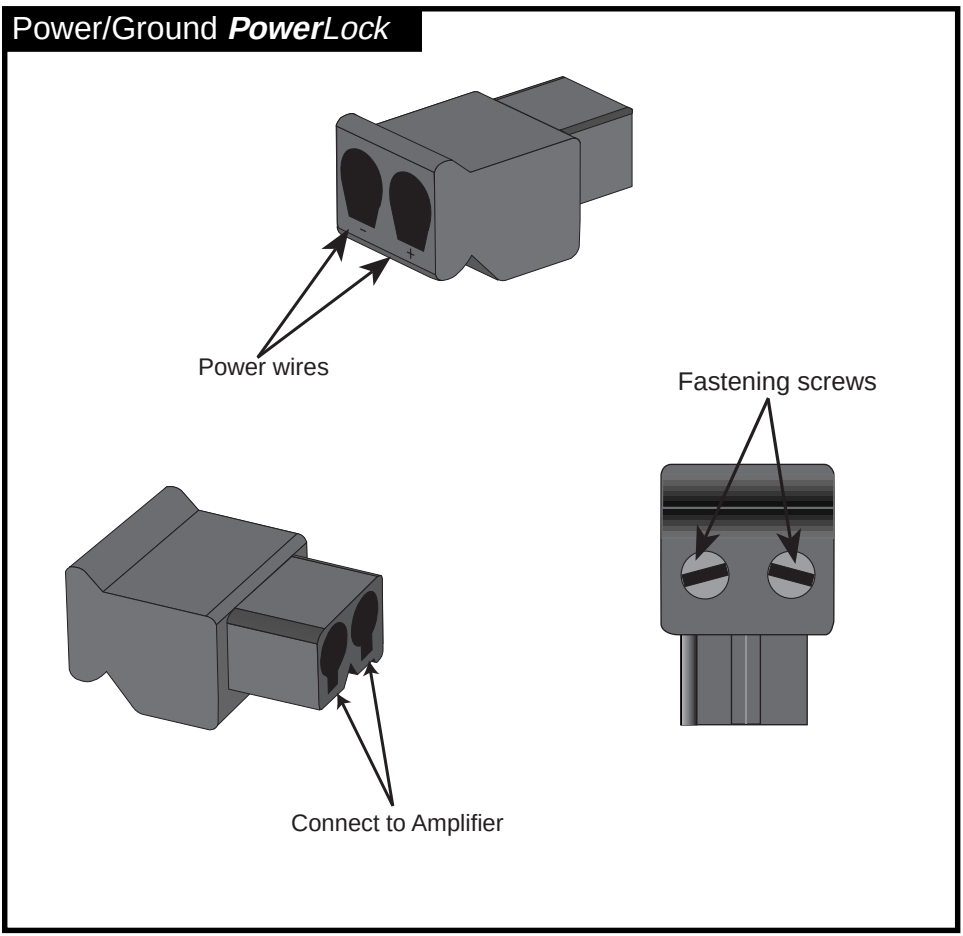
If your grand total current draw is over 50 amps (or total output power is over 300watts), you should run a ground wire beside your power wire from the battery to the amplifier(s) in addition to your regular ground wire. Keep the ground and power wires as close together as possible, and use the same gauge wire for both. This will ensure that you have a good ground path, and may eliminate such potential problems as engine noise and overheated amplifiers.

Charging System Considerations

If your grand total current draw is over 100 amps (or total output power is over 600watts), you are probably exceeding the capability of your charging system. Dimming lights and fluctuating voltage are solid indicators that you need to upgrade your alternator, battery (or go to multiple batteries), or both. Keep in mind that your amplifiers simply convert electrical energy to acoustical energy, and any electrical deficiency will compromise the performance of your sound system.
For more information about charging system upgrades, see your local authorized *Precision**Power*** Dealer or call *Precision**Power*** technical support at: *1-800-62**POWER***.

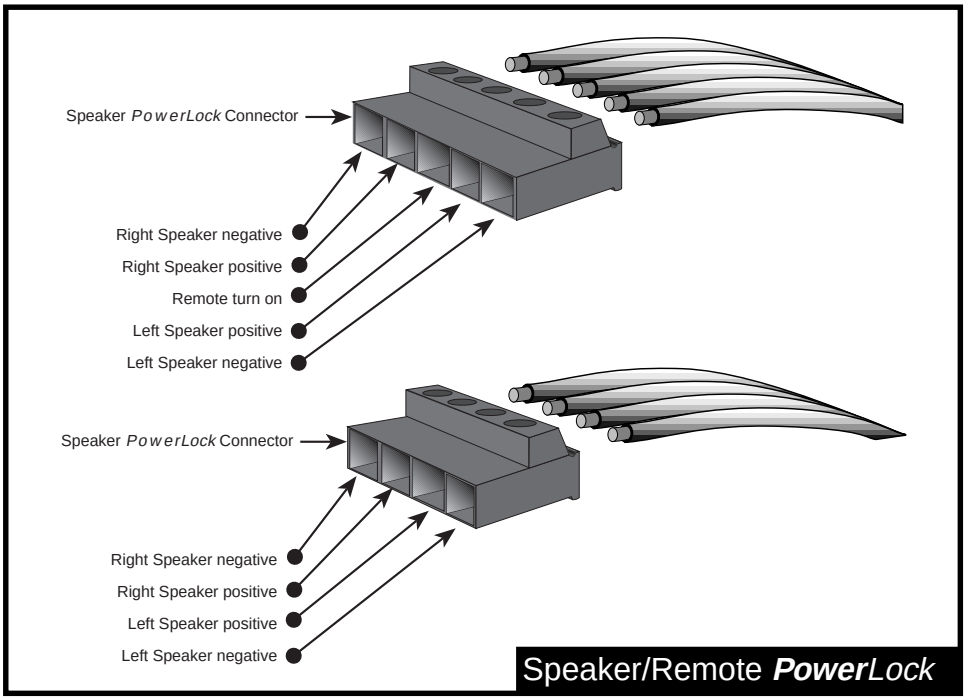
Once you have run both the power and ground wires, it's time to connect the cables to the amplifier. Cut off excess wire and, using wire strippers, strip the ends of the power and ground cables approximately 1/4 inch. Locate the ***Power****Lock* power and ground connector (supplied). With a small flat bladed screw driver, loosen the screws before attempting to insert the cables. Insert the wires into the appropriate hole, and tighten the screws. Once the wires are secure, the ***Power****Lock* may be plugged into the amplifier. The Power/Ground ***Power****Lock* will accommodate 4 gauge wire for the ***Pro6800***.

Power/Ground ***Power****Lock*



SPEAKER WIRING

Using 16 gauge or larger, run the speaker wires from the amplifier location through the vehicle to the speakers. Observe the same precautions for routing these wires that you followed for running the power and remote turn-on wires. Cut off excess and, using wire strippers, strip 1/4 inch of insulation. Locate the speaker/remote turn-on ***Power****Lock* connector. Loosen the four outer screws on top of the connector and insert the Channels 5/6 speaker leads into the end. Check to be sure you've maintained proper polarity before securing each wire.



Speaker/Remote ***Power****Lock*

For the front and rear channels, locate the four terminal speaker ***Power****Lock* connectors. On your new ***Pro6800*** PowerClass Amplifier, all speaker ***Power****Locks* plug into the amplifier with the screws facing up. Loosen the screws on the top of the blocks and insert the stripped ends of the speaker wires into the end. Double check polarity, secure each wire by tightening the screws, and plug the ***Power****Lock* connector into the amplifier with the screws on top.

Bridging

Any or all pairs of channels (1/2, 3/4 or 5/6) on your ***POWER****CLASS™* multi channel amplifier are capable of being bridged into a 4 ohm mono output without switches or bridging modules (2 ohm mono on Channels 5/6). This feature permits the creation of a mono channel for a subwoofer or center channel.

Deriving the mono channel is accomplished by using the left channel positive wire of the pair as the positive speaker wire and the right channel negative wire as the negative speaker wire. You should always be working with the wires of a single ***POWER****LOCK* speaker connector when bridging a pair of channels.

NOTE: It is important that a minimum 4 ohm impedance is observed (2 ohm mono on Channels 5/6). If the impedance drops significantly below 4 ohms while the amplifier is wired in the bridged configuration, the amplifier's protection circuitry may engage.

Mixed Mono Output

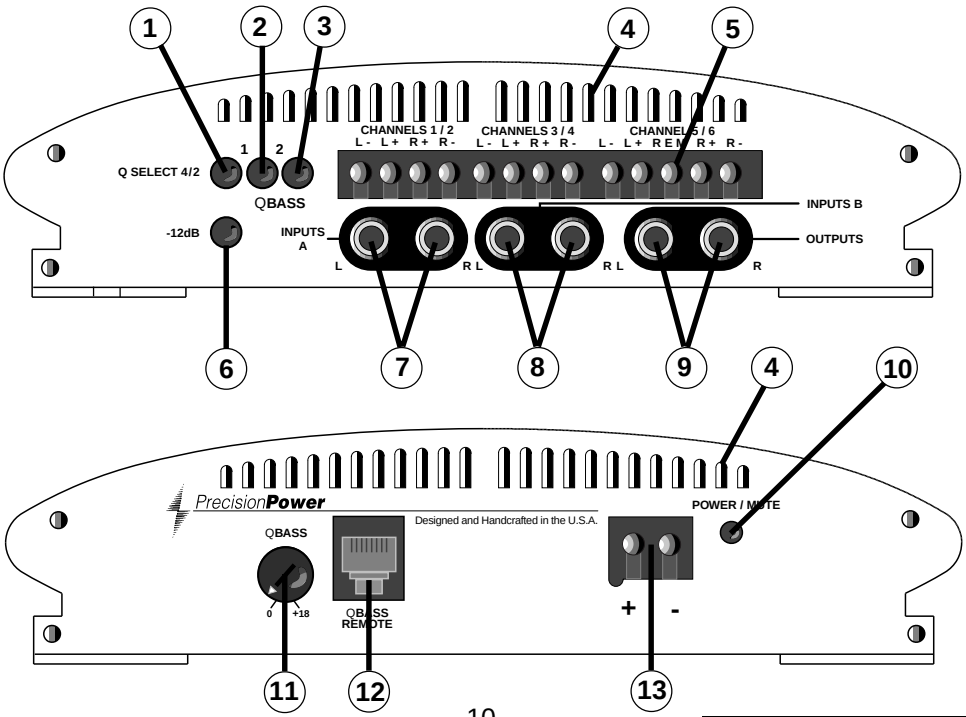
The ability to run stereo speakers while simultaneously running a mono output from the same channel pair is accomplished by running the stereo speakers normally and tapping into the appropriate wires for the "mixed mono" channel (left channel positive for the positive speaker wire and right channel negative for the negative speaker wire). Total speaker impedance should be no lower than 2 ohms on the stereo channels and 4 ohms on the mono channel.

NOTE: Passive crossovers must be used for "mixed mono" operation. Choose a low pass crossover around 100Hz for your subwoofer, then choose a high pass crossover for your stereo channels. The high pass crossover must be at the same or slightly higher frequency than the low pass crossover to maintain the correct impedance. See your *Precision****Power*** dealer or call *1-800-62****POWER*** for more information about passive crossovers.

ENDPLATE DIAGRAM

Pro6800

1. **Q SELECT 4/2**
   Push this button in for a Q setting of 4 and out for a setting of 2.
2. ***QBASS* 1**
   Use this switch with the ***QBASS* 2** to program the ***QBASS PLUS***™ circuit. (see page 2).
3. ***QBASS* 2**
   Use this switch with the ***QBASS* 1** to program the ***QBASS PLUS***™ circuit. (see page 2).
4. **COOLING VENTS** (see page 16).
5. **SPEAKER/REMOTE CONNECTOR**
   After connecting remote and speaker wires, plug in the ***Power****Lock* connectors here (see pages 7-9).
6. **-12dB**
   For use with high level inputs (4V up to 12V). Push this switch in to attenuate the input by 12dB (see page 14).
7. **INPUTS A**
   Plug in the Front RCA leads from your head unit here (see page 14 & 16).
8. **INPUTS B**
   Plug in the Rear RCA leads from your head unit here (see page 14 & 16).
9. **OUTPUTS**
   Left and Right RCA outputs provide band pass or mono low pass signal to another amplifier.
10. **POWER / MUTE indicator**
    A green light indicates that the amplifier is on, a red light indicates that the amplifier's muting circuits have been engaged by an ***ACM-420***.
11. ***QBASS*™ Level**
    Turn this control clockwise to boost the ***QBASS PLUS***™ circuit by up to 18dB.
12. ***QBASS REMOTE*™ plug in**
    Plug in the data cable from the optional ***QBASS REMOTE***™ dash mount level control here. (This will bypass the amplifier's on board ***QBASS***™ control)
13. **POWER / GROUND *POWER****LOCK***
    After you have securely connected your power and ground wires, plug in the Power / Ground ***POWER****LOCK* connector here.



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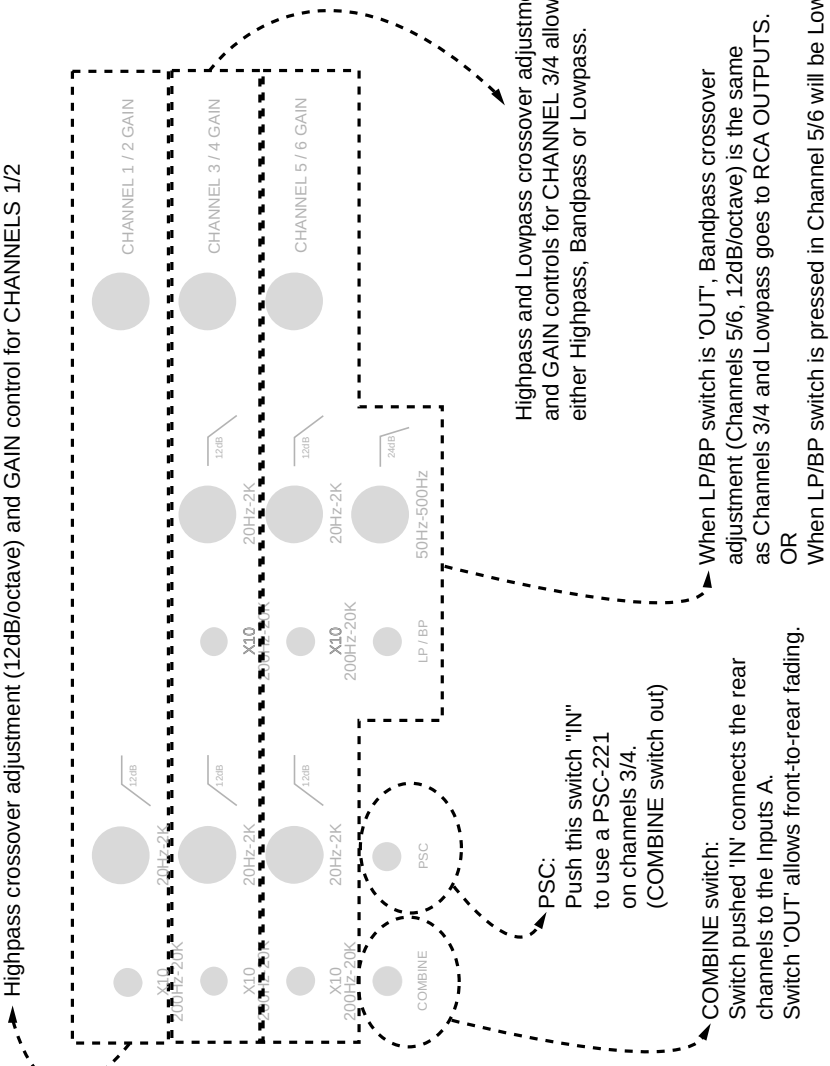
CONTROLS DIAGRAM

ONE


Highpass crossover adjustment (12dB/octave) and GAIN control for CHANNELS 1/2
CHANNEL 1 / 2 GAIN
CHANNEL 3 / 4 GAIN
CHANNEL 5 / 6 GAIN
12dB
24dB
X10
20Hz-2K
200Hz-20K
50Hz-500Hz
LP / BP
PSC
COMBINE
Highpass and Lowpass crossover adjustments and GAIN controls for CHANNEL 3/4 allow for either Highpass, Bandpass or Lowpass.
When LP/BP switch is 'OUT', Bandpass crossover adjustment (Channels 5/6, 12dB/octave) is the same as Channels 3/4 and Lowpass goes to RCA OUTPUTS.
OR
When LP/BP switch is pressed in Channel 5/6 will be Lowpass (24dB/octave) and RCA OUTPUTS are Bandpassed.
PSC:
Push this switch "IN" to use a PSC-221 on channels 3/4. (COMBINE switch out)
COMBINE switch:
Switch pushed 'IN' connects the rear channels to the Inputs A.
Switch 'OUT' allows front-to-rear fading.

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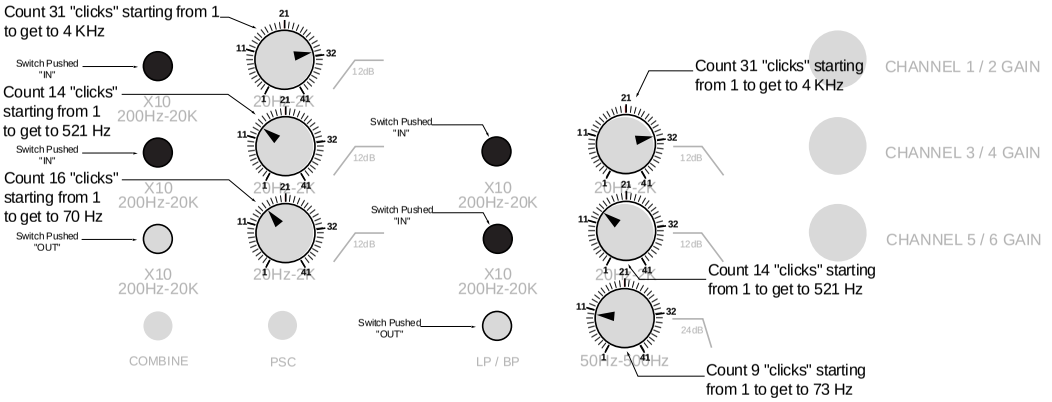
Settings For A Basic 3 Way System plus Sub Output

Example Crossover Points: Tweeters / Mid - 4 KHz
Mid / Midbass - 521 Hz
Midbass / Sub - 70 Hz


Count 31 "clicks" starting from 1 to get to 4 KHz
Switch Pushed "IN"
Count 14 "clicks" starting from 1 to get to 521 Hz
Switch Pushed "IN"
Count 16 "clicks" starting from 1 to get to 70 Hz
Switch Pushed "OUT"
X10 200Hz-20K
12dB
24dB
20Hz-2K
50Hz-3.5Hz
COMBINE
PSC
LP / BP
Switch Pushed "IN"
Switch Pushed "OUT"
Count 31 "clicks" starting from 1 to get to 4 KHz
Count 14 "clicks" starting from 1 to get to 521 Hz
Count 9 "clicks" starting from 1 to get to 73 Hz
CHANNEL 1 / 2 GAIN
CHANNEL 3 / 4 GAIN
CHANNEL 5 / 6 GAIN

(RCA outputs) Resulting frequency response at speaker outputs

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All *12dB***octave** *20Hz - 21KHz*
HighPass and ***BandPass***

Position	X1-Out	X10 - In
1	20 Hz	220 Hz
2	20 Hz	220 Hz
3	20 Hz	220 Hz
4	20 Hz	220 Hz
5	21 Hz	222 Hz
6	22 Hz	240 Hz
7	23 Hz	255 Hz
8	25 Hz	276 Hz
9	28 Hz	299 Hz
10	31 Hz	324 Hz
11	34 Hz	360 Hz
12	38 Hz	401 Hz
13	43 Hz	452 Hz
14	50 Hz	521 Hz
15	59 Hz	609 Hz
16	70 Hz	712 Hz
17	80 Hz	836 Hz
18	87 Hz	916 Hz
19	94 Hz	976 Hz
20	99 Hz	1.04 KHz
21	107 Hz	1.12 KHz
22	117 Hz	1.21 KHz
23	128 Hz	1.30 KHz
24	140 Hz	1.42 KHz
25	155 Hz	1.59 KHz
26	173 Hz	1.77 KHz
27	193 Hz	2.00 KHz
28	220 Hz	2.28 KHz
29	255 Hz	2.67 KHz
30	310 Hz	3.17 KHz
31	385 Hz	4.00 KHz
32	492 Hz	5.11 KHz
33	608 Hz	6.50 KHz
34	744 Hz	8.10 KHz
35	936 Hz	10.04 KHz
36	1.19 KHz	12.75 KHz
37	1.45 KHz	15.45 KHz
38	1.77 KHz	18.45 KHz
39	2.08 KHz	20.00 KHz
40	2.10 KHz	21.00 KHz
41	2.10 KHz	21.00 KHz

*24dB***octave** *mono* ***LowPass***

Position	Frequency
1	52 Hz
2	52 Hz
3	54 Hz
4	56 Hz
5	56 Hz
6	60 Hz
7	64 Hz
8	68 Hz
9	73 Hz
10	78 Hz
11	85 Hz
12	92 Hz
13	102 Hz
14	113 Hz
15	127 Hz
16	144 Hz
17	158 Hz
18	168 Hz
19	175 Hz
20	183 Hz
21	191 Hz
22	200 Hz
23	210 Hz
24	221 Hz
25	234 Hz
26	246 Hz
27	260 Hz
28	277 Hz
29	295 Hz
30	315 Hz
31	337 Hz
32	362 Hz
33	382 Hz
34	396 Hz
35	410 Hz
36	422 Hz
37	431 Hz
38	438 Hz
39	444 Hz
40	450 Hz
41	450 Hz

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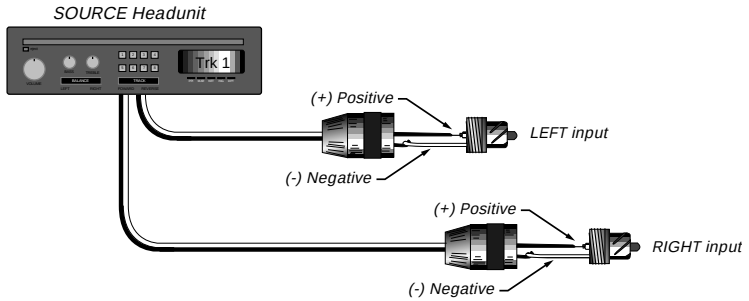
INPUTS

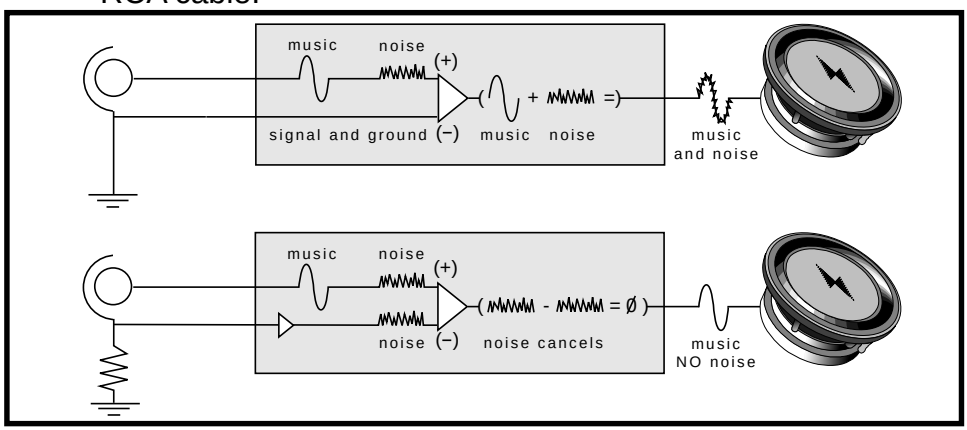
There are two sets of RCA INPUTS on the front end of your amplifier. Plug the RCA cables from your head unit into the appropriate set of inputs, front and rear. If your head unit doesn't have RCA outputs don't worry. Simply add a set of RCA plugs (available at your dealer) to your front or rear set of speaker leads (see drawing below), plug them into the input jacks, and push in the -12dB switch.



WARNING: *If you are using a source unit with bridged high powered (or "floating ground") speaker outputs, a suitable high to low level adapter must be used. If you are unsure about your head unit see your local Precision**Power** dealer or call **1-800-62Power**.*

Balanced Differential Inputs

This circuitry reduces noise radiated into your signal cables by up to 40dB. This is equivalent to a noise reduction of approximately one hundred times what the noise level would be without this circuitry. It provides all the benefits of a true 'balanced' line without the need of any special cables (see diagram below). This type of input works with any conventional RCA cable.



CROSSOVER Operation

Your new ***POWER****CLASS*™ amplifier has crossover circuits built-in to provide exceptional system flexibility without the added expense and installation of an outboard crossover.

CHANNELS 1/2

The first row of controls on the top of your ***Pro6800*** allow you to send a variable highpass signal (20 Hz to 20 KHz) to Channels 1/2. (12dB/octave) With the X10 switch in the "out" position, crossover adjustment can be made by turning the highpass dial up or down for crossover points between 20 Hz and 2000 Hz. By pressing the X10 switch "in" you are able to make crossover adjustments between 200 Hz and 20 KHz. A separate gain control is designated for these channels and should be adjusted according to page 16.

CHANNELS 3/4

The second row of controls on the top of your ***Pro6800*** allow you to send a variable highpass or bandpass signal (20 Hz to 20K Hz) to Channels 3/4. These controls operate in the same fashion as above. The first set of controls are the highpass side of the bandpass, and the second set of controls are the lowpass side of the bandpass. In order to get a full highpass to 20 KHz press the second X10 switch in and turn the second (lowpass) dial fully clockwise to 20 KHz position.

CHANNELS 5/6

The third row of controls on the top of your ***Pro6800*** operate in the same fashion as Channels 3/4 crossovers. However, you have one more option on these channels: you can select a bandpass crossover (bandpass 2 - third row) or lowpass (fourth row). By leaving the LP/BP switch out the bandpass 2 signal will be assigned to CHANNEL 5/6 and lowpass assigned to the RCA outputs.By pressing the LP/BP switch in, the lowpass (fourth row) will be assigned to CHANNEL 5/6 and bandpass 2 assigned to the RCA OUTPUTS. The lowpass dial can be adjusted from 50 Hz to 500 Hz and provides a 24dB/octave slope.

Input Combine

Your multi channel *POWERCLASS™* amplifier can use both front and rear outputs from your head unit to maintain the ability to fade front to rear, or you can run a single set of RCAs to the front inputs and push in the COMBINE switch on the amplifier end plate to route the INPUT A signal to channels 3/4 as well.

PSC Switch

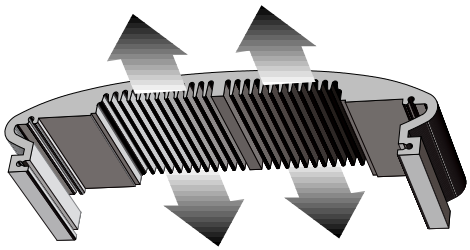
Channels 5/6 will be used as subwoofer channels in most cases, and therefore receive summed information from Inputs A and B. This allows Front/Rear fading without affecting the subwoofer level. In order to use a ***PSC-221*** phase shift controller on bandpassed midrange drivers (Channel 3/4) without causing cancellation in your subwoofer channels, you can isolate Inputs B to Channel 3/4 only by pushing the PSC switch 'IN'.

Adjusting The Amplifier Input Gain

1. Adjust all amplifier input gain controls to just above minimum sensitivity (fully counterclockwise).
2. Using the cleanest source (CD), with music playing turn up the head unit until you can hear distortion. Now turn it down a bit until you cannot hear the distortion.
3. Increase the Amplifier gain (clockwise) until the onset of audible distortion. Then decrease the gain to the point just before the distortion starts. This setting minimizes background noise and prevents overload.
4. Repeat step 3 for any remaining amplifiers in the system.

Heatsink Cooling

The unique heatsink on your ***POWER****CLASS™* amplifier has been designed with fins on the inside of the aluminum mass. This allows for the transfer of heat from the circuitry to the heatsink fins and out through the vents in the endplates. Be sure you have ample space around the amplifier for cooling, at least 2" on all sides.



NO SOUND — Is the LED lit?

YES

WHAT COLOR ?

RED

Central Muting is engaged. Remote turn-on wire must have more than 8 volts to release central muting. Check Remote turn-on at the head unit. You may need to install a relay if the head unit doesn't put out sufficient voltage.

GREEN

Substitute RCA inputs with another source, and connect a known good speaker to one channel.

NO

Check Power and Remote turn-on wire for voltage. Make sure Ground wire is secure.

STILL NO SOUND - See your Authorized *Precision**Power*** Dealer or Call *1-800-62**POWER***.

SOUND IN ONE CHANNEL ONLY

Reverse left and right speakers by unplugging the speaker connector, turning it over and plugging it back in.

SOUND IS NOW IN

OPPOSITE CHANNEL

Reverse RCA inputs

SAME CHANNEL

Problem is in the speaker or speaker wire of the silent channel.

SOUND IS NOW IN

OPPOSITE CHANNEL

Reverse RCAs at head unit

SAME CHANNEL

Problem is in the Amp. See your local Authorized *Precision**Power*** Dealer or call *1-800-62**POWER***.

SOUND IS NOW IN

OPPOSITE CHANNEL

Problem is in the head unit

SAME CHANNEL

Problem is in the RCA cables

TROUBLE SHOOTING

NO SOUND ON BANDPASS CHANNELS

Be sure that crossover points are set properly. Is the highpass set at a higher frequency than the lowpass or the lowpass set lower than the highpass, creating a no pass?

YES	NO
Readjust crossovers and then test system again.	Check speaker wiring for short circuits or loose connections. Be sure that powerlock plugs are in place properly (screws facing up) and observe correct wiring diagram.

STILL NO SOUND - See your Authorized *Precision**Power*** Dealer or Call *1-800-62**POWER***.

NO SOUND IN BRIDGED MODE

Check speaker wiring for short circuits or loose connections. Be sure that powerlock plugs are in place properly (screws facing up) and observe correct wiring diagram.

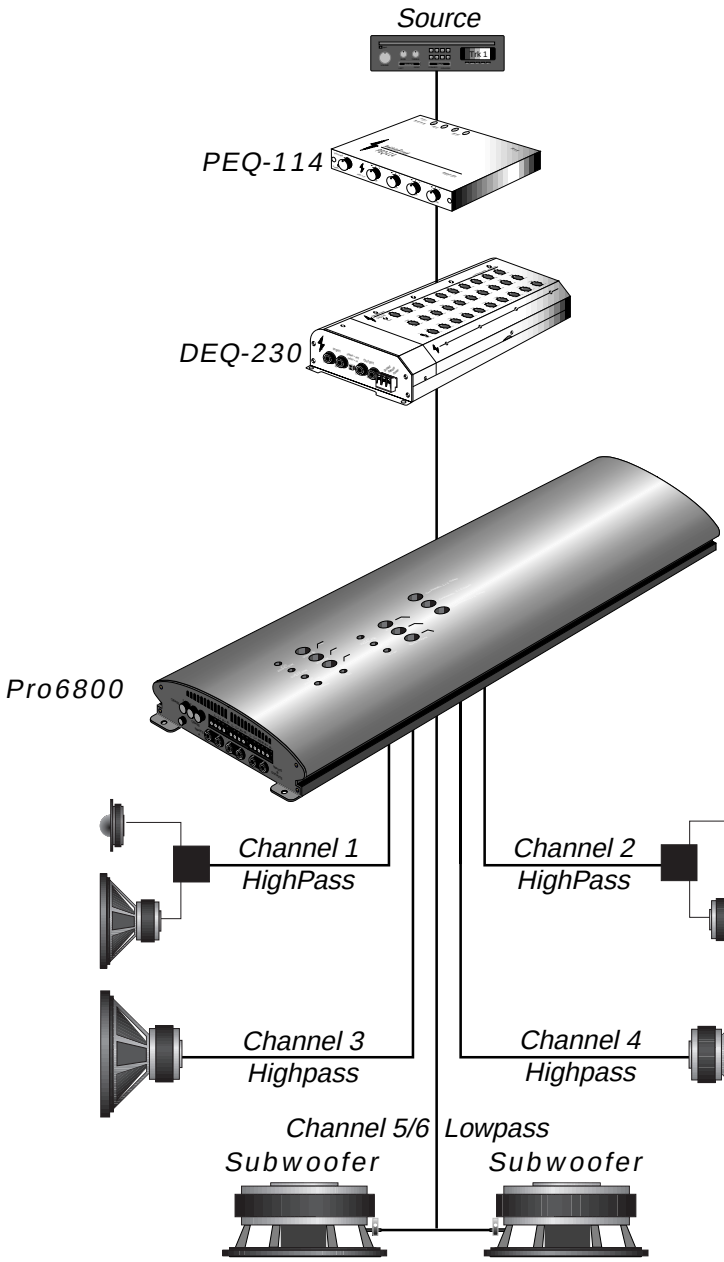
AMPLIFIER TURNS DOWN

Both excessive temperature and low impedance (or short circuit) conditions will activate the amplifier's AM IV protection circuitry, which turns down the amplifier's output. When the amplifier cools down, or the impedance is corrected, the AM IV will restore full power.
If your amp is turning down check your speakers and wiring for low impedance and short circuits.Also,ensure that there is nothing blocking the normal convective airflow of the amplifier. No obstruction should be within 2" of the amplifier on all sides.

NOTE: Low battery voltage will cause the amplifier to run warmer.

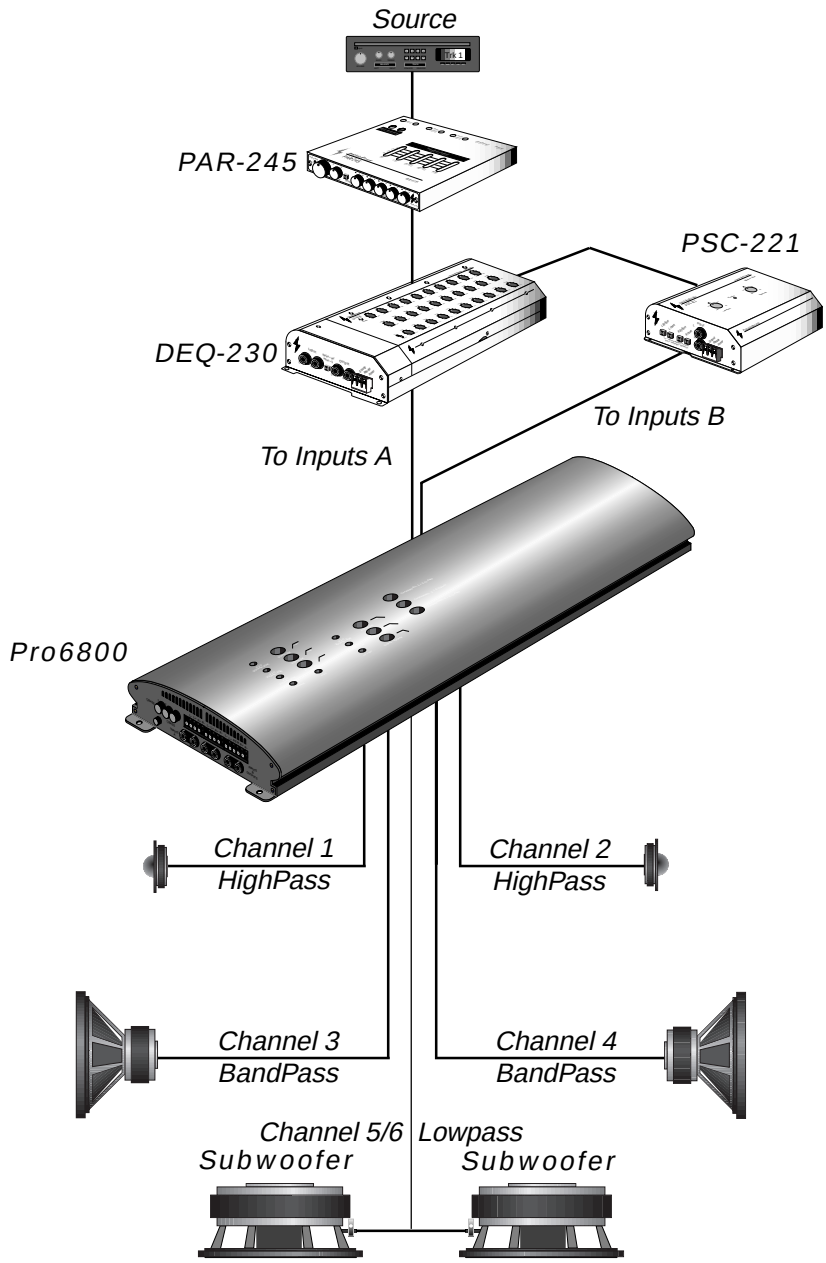
SYSTEM DIAGRAM

ONE



Basic System Layout

SYSTEM DIAGRAM
TWO



System Layout Using PSC Switch

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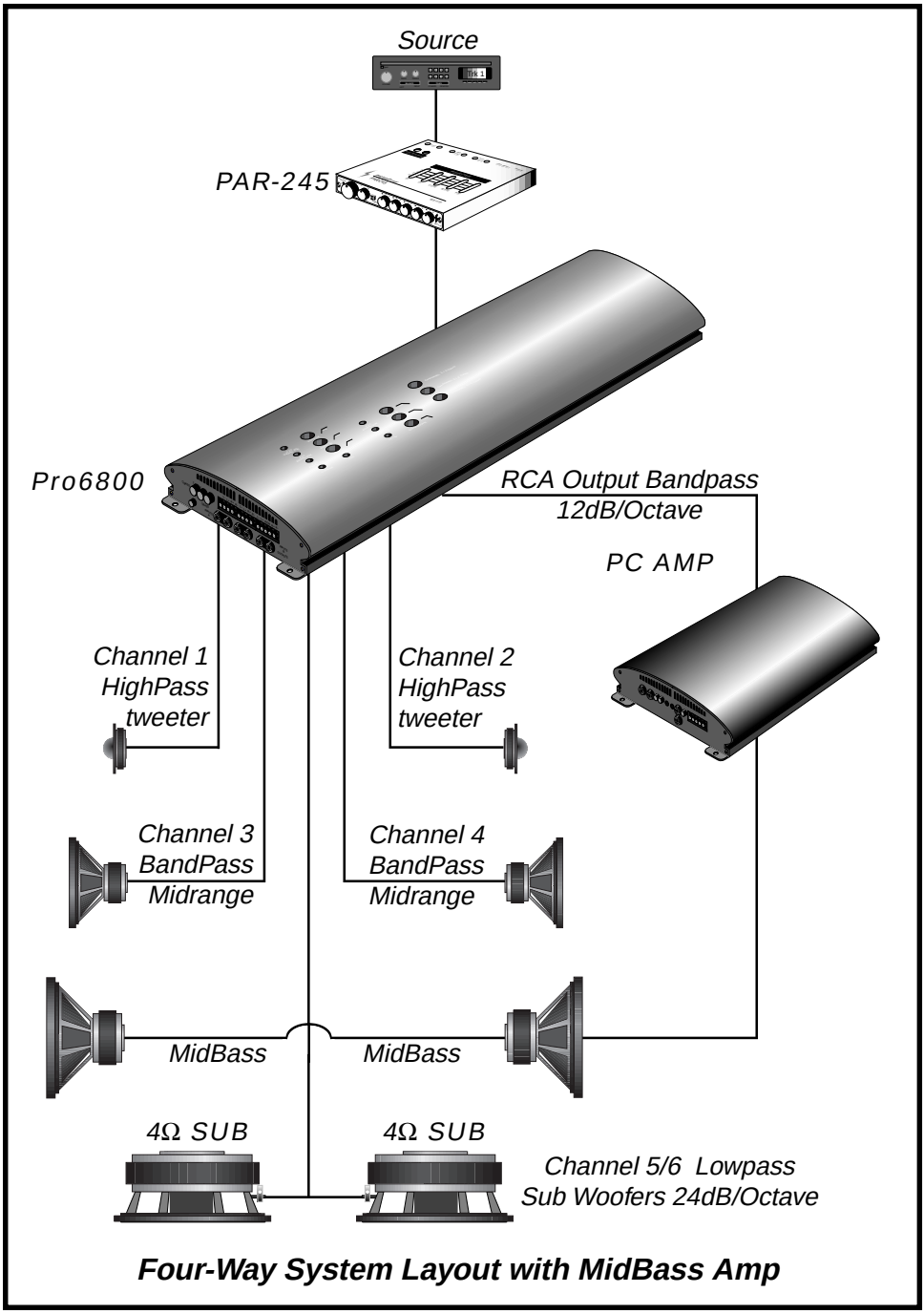
SYSTEM DIAGRAM

THREE



Four-Way System Layout with MidBass Amp

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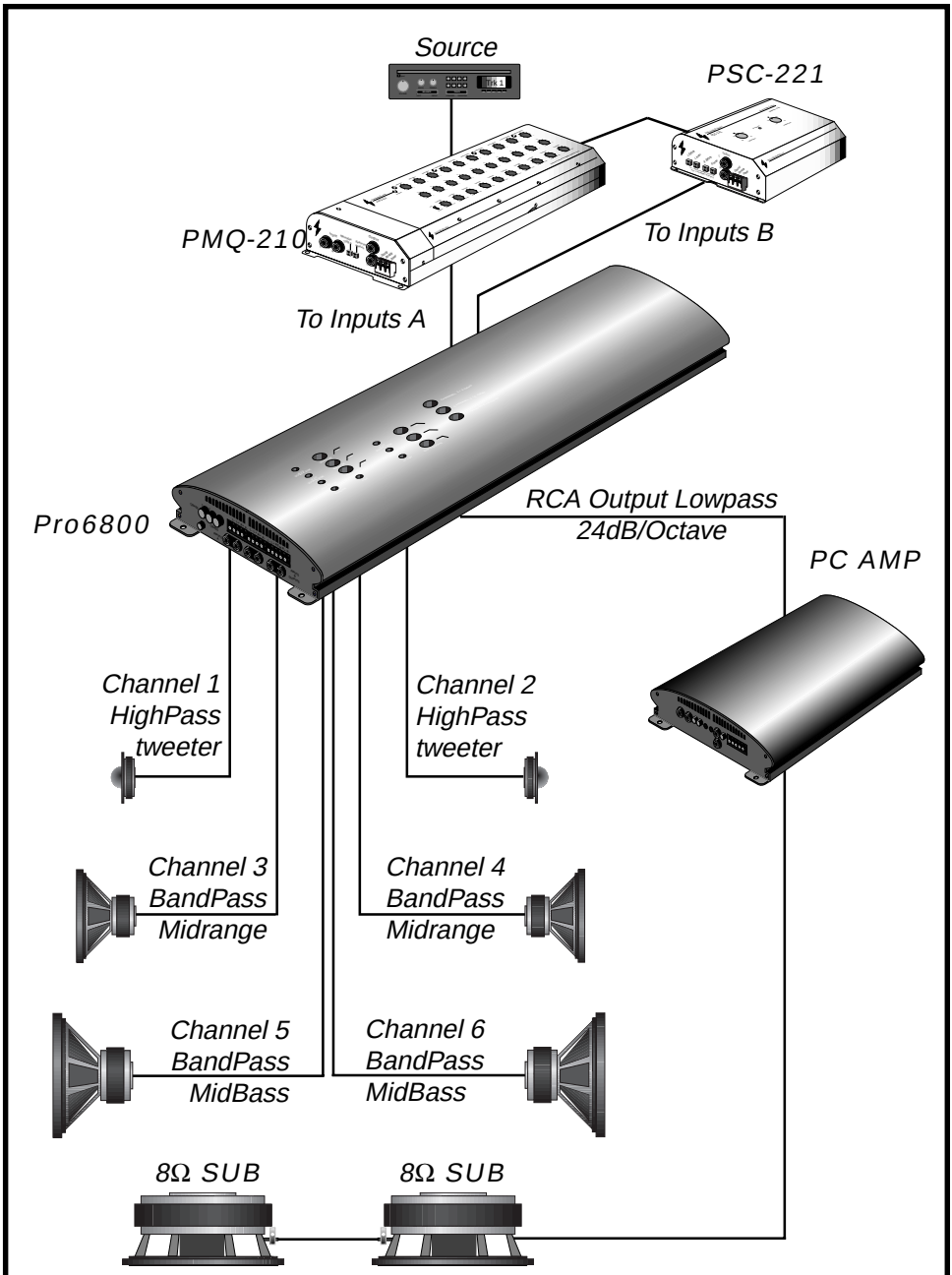
SYSTEM DIAGRAM

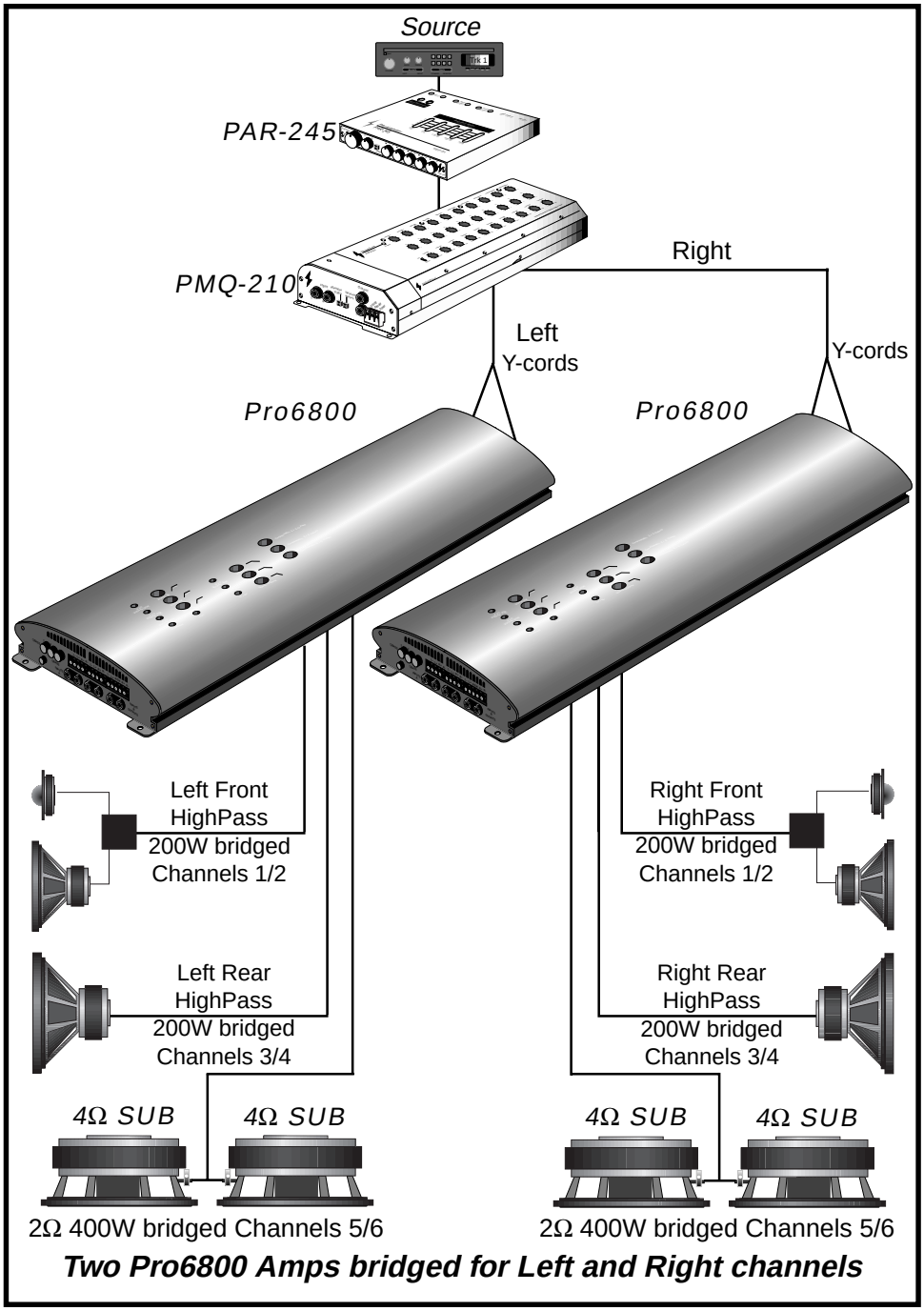
FOUR



Four-Way System Layout using a separate PC amp for Subs

SYSTEM DIAGRAM

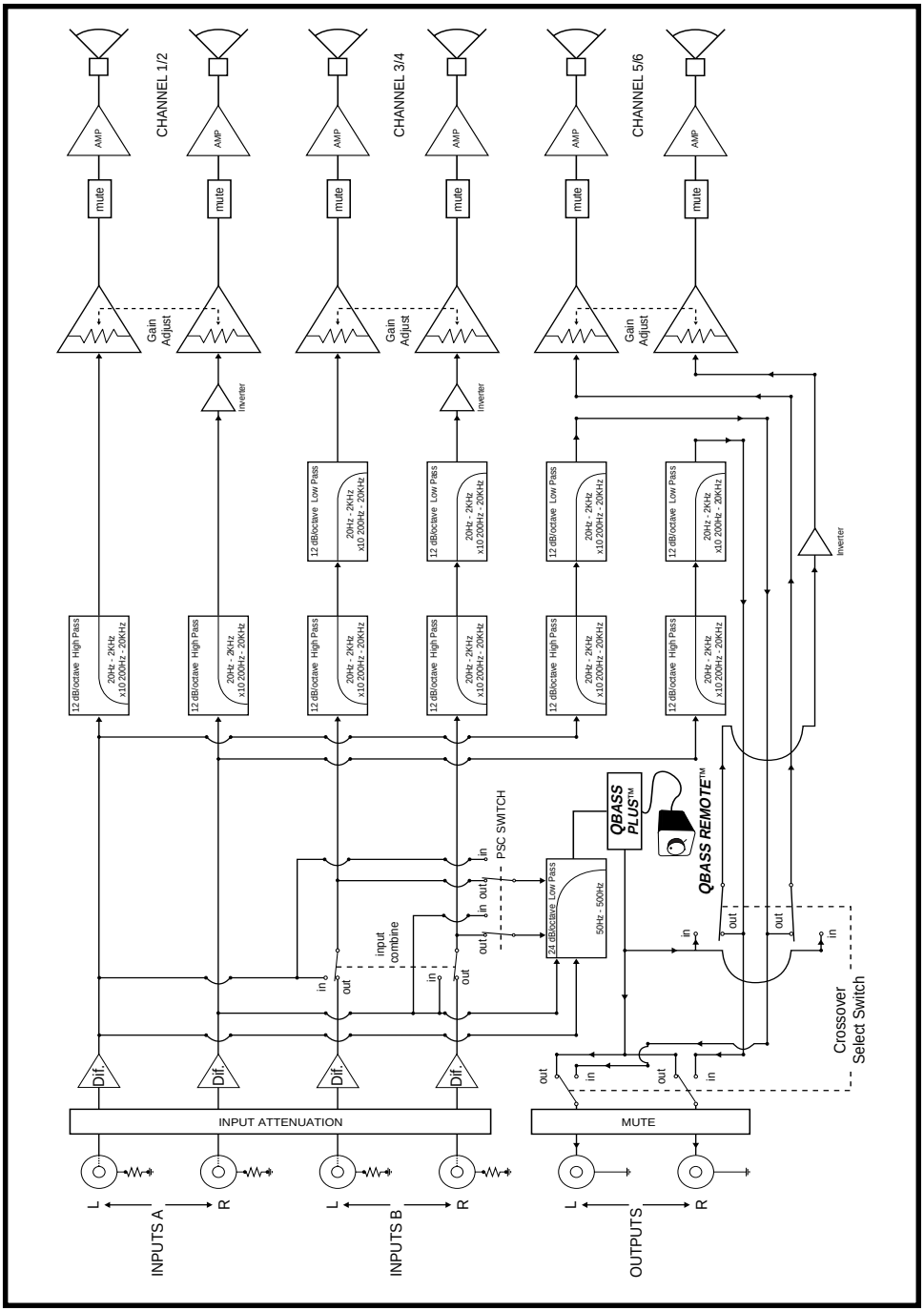
FIVE



Two Pro6800 Amps bridged for Left and Right channels

BLOCK DIAGRAM

Pro6800



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Three-Year Limited U.S.A. Warranty

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. *Precision**Power*** warrants its products to be free from defects in materials and workmanship under normal use and service for a period of three (3) years from the date of original purchase when the unit is installed by an Authorized Dealer. Non-Authorized Dealer installed products carry a one (1) year parts and ninety (90) days labor limited warranty. The extent and conditions of Limited Warranty are as follows:

1. Authorized Dealer Installed Products: *Precision**Power*** will either repair or replace at no charge, to the original purchaser, any unit which *Precision**Power's*** examination discloses to be defective and under warranty, provided the defect occurs within three (3) years from the date of original purchase when the unit is installed by an Authorized Dealer and the product is returned immediately to *Precision**Power***. This warranty is not transferable.

2. Non-Authorized Dealer Installed Products: *Precision**Power*** will either repair or replace at no charge, to the original purchaser, any unit which *Precision**Power's*** examination discloses to be defective and under warranty, provided the defect occurs within ninety (90) days from the date of purchase and the product is returned immediately to *Precision**Power***. Warranty claims beyond ninety (90) days for Non-Authorized Dealer Installed Products will be for parts only and will extend for one (1) year from the date of purchase. This warranty is not transferable.

3. The date of purchase and proof of Authorized Dealer Installation of a PrecisionPower product must be established by an original sales receipt which must accompany the article being returned for warranty work.

4. This warranty shall NOT apply to any *Precision**Power*** product found to have the original factory serial number removed or defaced. All products received (by *Precision**Power***) for in warranty or out of warranty repair, with their original serial numbers removed or defaced, will NOT be repaired and will be returned to sender, freight collect. Refer to original packaging for the serial number of your component speakers.

5. The provisions of this warranty shall not apply to any *Precision**Power*** product used for a purpose for which it is not designed, which has been repaired or altered in any way, or which has been connected, installed, or adjusted other than in accordance with the instructions furnished in *Precision**Power's*** owner's manual. Nor shall this warranty apply to any part which has been subject to misuse, neglect, or accident.

6. PrecisionPower does not authorize any other persons to assume any other liability in connection with its products. THIS WARRANTY IS THE ONLY EXPRESS WARRANTY MADE BY PRECISIONPOWER APPLICABLE TO ITS PRODUCTS. ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO PRECISIONPOWER PRODUCTS IS LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY. PRECISIONPOWER SHALL NOT BE LIABLE FOR THE INCIDENTAL, CONSEQUENTIAL, OR COMMERCIAL DAMAGES RESULTING FROM THE BREACH OF THIS WRITTEN WARRANTY. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so the above limitations or exclusions may not apply to you.

7. Your product will be serviced on an in-warranty basis within the warranty period for the correction of warranted defects. If improper operation of your *Precision**Power*** product should occur, contact your Authorized Dealer for assistance with the return and factory repair of your *Precision**Power***
product. If an Authorized Dealer is not available, return the unit including your name, telephone number, return address, a copy of your sales receipt, and a description of the problem to:

PrecisionPower,Inc.
Service Department
4829 S. 38th Street
Phoenix, AZ 85040-2964

TO RETURN PRECISIONPOWER PRODUCTS OUT OF WARRANTY: Return the unit, postage prepaid, in the original protective carton. Please include a description of the problem and, if desired, a request for an estimate of repair costs. Unless a request for an estimate is included, the unit will be repaired as necessary. Please contact *Precision**Power*** Customer Service at 1-800-62-POWER for questions concerning out of warranty repair charges. Repaired unit will be returned with an itemized statement, C.O.D.

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